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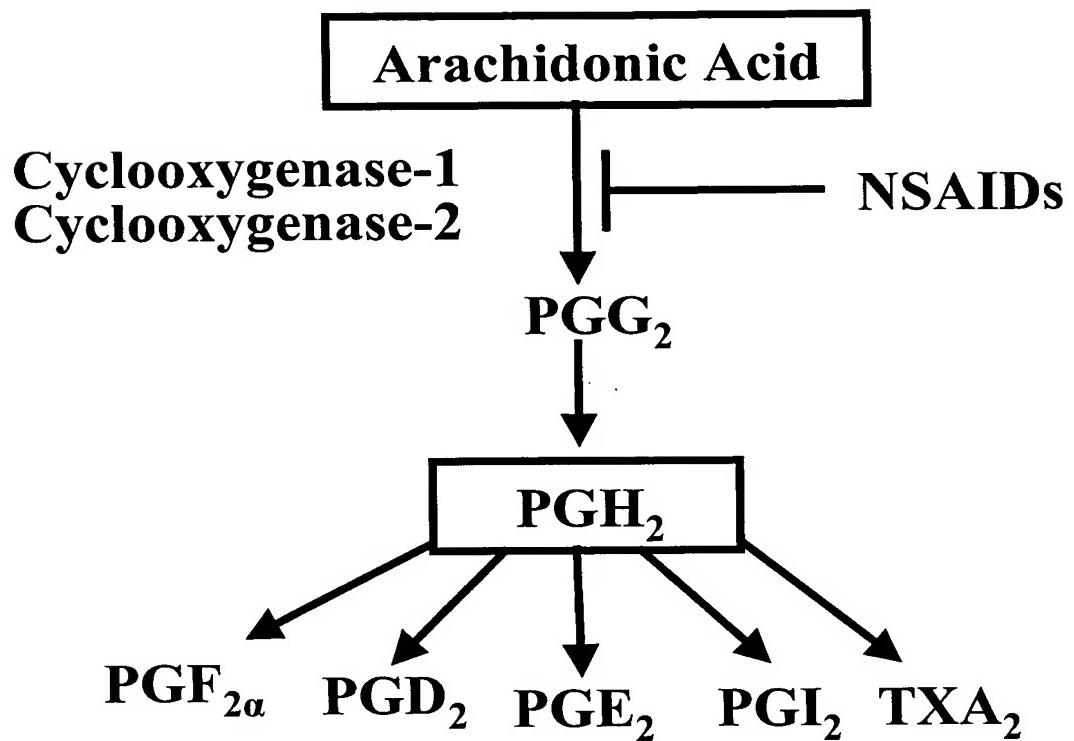


FIGURE 1

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Human COX-1 Variant ALT-1

atgagccgga gtctttgtc ccggtttcttg ctgttcctgc tcctgctccc gccgctcccc 60  
gtcctgtcg cggacccagg ggcgccccacg ccaggggccc ctttgggagg aagccgcagg 120  
caccaggaa aatagatgtcc ctttctccag cctctaaccg tctggaaacc catcctgatt 180  
cccattgcca gtggagaagg tctccctgg tgaagacttc gggagaacat gggagatgga 240  
aatacatta ggagccggga tgcttcatct ggggttaag agatccccat tgagcaa**ATG** 300  
aggaaaaccga ggctcatgaa tccctgttgc tactatccat gccagcacca gggcatctgt 360  
gtccgcttcg gccttgaccg ctaccagtgt gactgcaccc gcacgggcta ttccggcccc 420  
aactgcacca tccctggct gtggacctgg ctccggatt cactgcggcc cagcccctct 480  
ttcacccact tcctgctcac tcacgggcgc tggttctggg agtttgtcaa tgccacccatc 540  
atccgagaga tgctcatgct cctggtaactc acagtgcgc ccaaccttat ccccaagtccc 600  
cccacctaca actcagcaca tgactacatc agctgggagt ctttctccaa cgtgagctat 660  
tacactcgta ttctgcccctc tggccctaaa gattggccca caccatggg aaccaaagg 720  
aagaagcagt tgccagatgc ccagctctg gcccggcgct tcctgcttag gaggaagttc 780  
atacctgacc cccaaaggcac caacccatg ttgccttctt ttgcacaaca cttcacccac 840  
cagttcttca aaacttctgg caagatgggt cctggcttca ccaaggcett gggccatggg 900  
gtagacctcg gccacattt tggagacaat ctggagcgctc agtataact gcggctcttt 960  
aaggatggga aactcaagta ccaggtgctg gatggagaaaa tggatggccctt ctcggtagaa 1020  
gaggcgctg tggatgtca ctacccctga ggcattccgc cccagagcga gatggctgtg 1080  
ggccaggagg tggatgggt ctcatgtctgt atgccaacgct ctggctacgt 1140  
gagcacaacc gtgtgtgtga cctgctgaag gctgagcacc ccacccgggg ccatgagcag 1200  
ctttccaga cgacccgcct catcctcata ggggagacca tcaagattgt catcgaggag 1260  
tacgtgcagc agctgagttt ctatccctg cagctgaaat ttgaccaga gtcgtgttc 1320  
gggtccagt tccaataccg caaccgcatt gcatggagt tcaaccatctt ctaccactgg 1380  
cacccttca tgccctgactc cttcaaggtt ggctccagg agtacagcta cgagcagttc 1440  
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cgccagattt ctggccggat cgggtggggc aggaacatgg accaccatctt cctgcattgt 1560  
gctgtggatg tcattcaggaa gtctcgggag atgcggctgc agcccttcaa tgagtaccgc 1620  
aagaggtttt gcatgaaacc ctacaccctcc ttccaggagc tctgtggatggaa gaaggagatg 1680  
gcagcagagt tggaggaattt gatggagac attgtatgcgt tggagttcta ccctggactg 1740  
cttcttggaaa agtgcctatcc aaactctatc ttgggggaga gtatgataga gattggggct 1800  
cccttttccc tcaagggtct ccttaggaat cccatctgtt ctccggagta ctggaaagccg 1860  
agcacatcc ggcggcgaggt gggcttaac attgtcaaga cggccacact gaagaagctg 1920  
gtctgcctca acaccaagac ctgtccctac gttcccttc gttgtggccgga tgccagtcag 1980  
gatgatgggc ctgctgttga acagagctc**T GA**

FIGURE 2

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Human COX-1 Variant ALT-2

atgagccgga gtctcttgc ctgggtcttg ctgttcctgc tcctgctccc gccgctcccc 60  
gtcctgctcg cggaccagg ggcgcacg ccagggcct ctttggagg aagccgcagg 120  
caccaaggaa aatgagttcc ctttctccag cctctaaccg tctggaaacc catcctgatt 180  
cccattgcca gtggagaagg tctccctgg tgaagacttc gggagaacat gggagatgga 240  
aatacattta ggagccggga tgcttcatct ggggttaag agatcccat tgagcaa**ATG** 300  
aggaaaaccga ggctcaggaa gaagcagttg ccagatgcc agctcttgc cggccgttc 360  
ctgctcagga ggaagttcat acctgacccc caaggcacca acctcatgtt tgccttctt 420  
gcacaacact tcacccacca gttctcaaa acttctggca agatgggtcc tggcttcacc 480  
aaggccttg gccatgggtt agacctcggc cacatattatg gagacaatct ggagcgtcag 540  
tatcaactgc ggctctttaa ggatggaaa ctcaagtacc aggtgcttga tggagaaatg 600  
tacccgcct cggtagaaga ggccgtgtt ttgatgcact acccccggg catccgc 660  
cagagccaga tggctgtgg ccaggagggtt tttgggtgc ttccctggct catgctgtat 720  
gccacgtct ggctacgtga gcacaaccgt gtgtgtgacc tgctgaaggc tgagcacccc 780  
acctggggcg atgagcagct tttccagacg accccgcctca tcctcatagg ggagaccatc 840  
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gaccaggagc tgctgttcgg tgtccagttt caataccgca accgcattgc catggagttc 960  
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tacagctacg agcagttctt gttcaaacacc tccatgttgg tggactatgg gtttggggcc 1080  
ctggggatg ccttctctcg ccagattgtt ggccggatcg gtggggcag gaacatggac 1140  
caccacatcc tgcattgtggc tgtggatgtc atcaggggagt ctcggagat gcccgtc 1200  
cccttcaatg agtaccgcaa gaggtttggc atgaaaccctt acaccctt ccaggagctc 1260  
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gagtttacc ctggactgtt tttggaaaag tgccatccaa actctatctt tggggagagt 1380  
atgatagaga ttggggctcc cttttccctc aagggtctcc tagggaaatcc catctgttct 1440  
ccggagttact ggaagccgag cacatttggc ggcggagggtt gcttaacat tgtcaagacg 1500  
gccacactga agaagcttgtt ctgcctcaac accaagacat gtccttacgt ttccctccgt 1560  
gtggccggatg ccagtcagga tgatgggcct gctgtggagc gaccatccac agagctc**TGA** 1620  
ggggcaggaa agcagcattt tggaggggag agctttgtc ttgtcattcc agagtgtga 1680  
ggccagggtt gatggtctt aatgctcatt ttctgggtt gcatggtgag tggatgggtt 1740  
gacattttaga actttaagtc tcaccattt tctggaatat tggatgttctt 1800  
cagaatgctg aactcctt 1818

FIGURE 3

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Human COX-1 Variant ALT-3

atgagccgga gtctttgct ccgttcttg ctgttcctgc tcctgctccc gccgctcccc 60  
gtcctgctcg cgacccagg ggcccccacg ccaggggcct ctttggagg aagccgcagg 120  
caccaggaa aatgagttcc ctttctccag cctctaaccg tctgggaacc catcctgatt 180  
cccattgcca gtggagaagg tctccctgg tgaagacttc gggagaacat gggagatgga 240  
aatacattta ggagccggga tgcttcatct ggggtttaag agatccccat tgagcaa**ATG** 300  
aggaaaaccga ggctcatgaa tccctgttgt tactatccat gccagcacca gggcatctgt 360  
gtccgcttcg gccttgaccg ctaccagtgt gactgcaccc gcacgggcta ttccggccccc 420  
aactgcacca tccctggcct gtggacctgg ctccggaatt cactgccc cagccccctct 480  
ttcacccact tcctgctcac tcacgggcgc tggttctggg agttgtcaa tgccaccttc 540  
atccgagaga tgctcatcg cctggtaact acagtgcgct ccaaccctat ccccaagtccc 600  
cccacctaca actcagcaca tgactacatc agctgggagt ctttctccaa cgtgagctat 660  
tacactcgta ttctgcctc tggcctaaa gattgccccca caccatggg aaccaaagg 720  
aagaagcagt tgccagatgc ccagctcctg gcccggcgt tcctgctcag gaggaagttc 780  
atacgtgacc cccaaggcac caacctcatg ttgccttct ttgcacaaca cttcacccac 840  
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ctttccaga cgacccgcct catcctcata gggagacca tcaagattgt catcgaggag 1260  
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cacccttca tgcctgactc cttcaagatc ggtggggca ggaacatgga ccaccacatc 1440  
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gagtaccgca agaggttgg catgaaaccc tacacctcct tccaggagct ctaggagag 1560  
aaggagatgg cagcagagtt ggaggaattt tatggagaca ttgatgcgtt ggagtctac 1620  
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attggggctc cctttccct caagggtctc cttagggaaatccatctgttc tccggagttac 1740  
tggaaaggccga gcacatttgg cggcgagggtg ggcttaaca ttgtcaagac ggccacactg 1800  
aagaagctgg tctgcctcaa caccaagacc tgccttacg ttccctccg tgcggat 1860  
gccagtcagg atgatggggcc tgctgtggag cgaccatcca cagagtc**TG** Aggggcagga 1920  
aagcagcatt ctggaggggaa gagtttgtt ctgtcattt cagagtgcgtg aggccagggc 1980  
tgatggtctt aaatgctcat ttctgtttt ggcattgtga gtgtgggt tgacatttag 2040  
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gaactcctt 2109

FIGURE 4

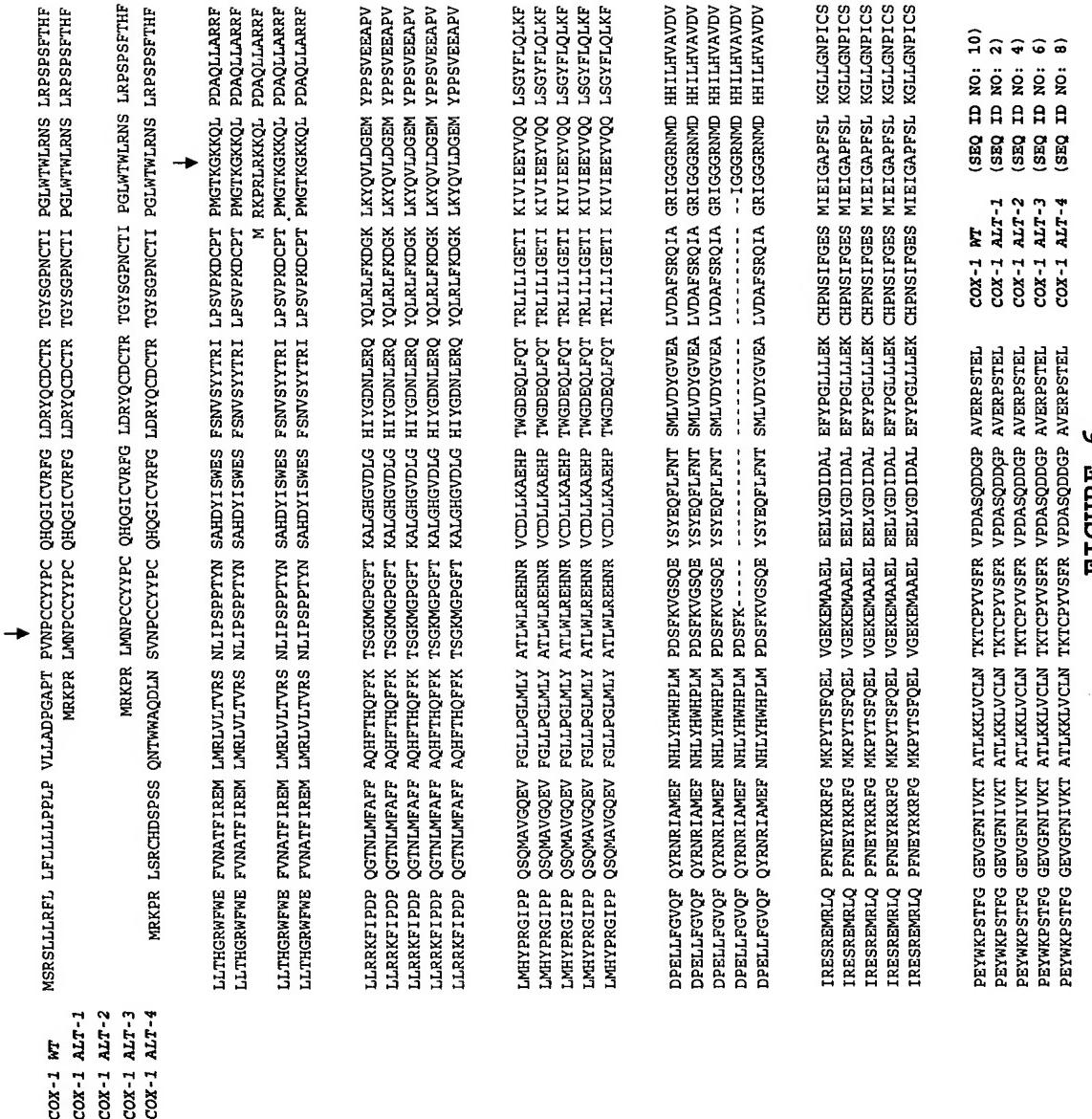
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Human COX-1 Variant ALT-4

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caccaaggga aatgagttcc ctttccag cctctaaccg tctggaaacc catcctgatt 180  
cccattgcc a gtggagaagg tctccctgg tgaagacttc gggagaacat gggagatgga 240  
aatacattta ggagccggga tgcttcatct ggggtttaag agatccccat tgagcaa**ATG** 300  
aggaaaaccga ggctcagtag gtgccatgat tccccaagct cacaaaatac atgggggcc 350  
caggatctga actcagtgaa tccctgttgt tactatccat gccagcacca gggcatctgt 360  
gtccgcttcg gccttgaccg ctaccagtgt gactgcaccc gcacgggcta ttccggcccc 420  
aactgcacca tccctggct gtggacctgg ctccggaatt cactgcggcc cagccccctct 480  
ttcacccact tcctgctcac tcacgggcgc tggttctggg agttgtcaa tgccaccc 540  
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cccacctaca actcagcaca tgactacatc agctggaggt ctttctccaa cgtgagctat 660  
tacactcgta ttctgccctc tgcctaaa gattgccccca caccatggg aaccaaagg 720  
aagaagcagt tgccagatgc ccagctcctg gcccgcgtt tcctgctcag gaggaagg 780  
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gtagacctcg gccacattta tggagacaat ctggagcgtc agtatcaact gcccgtctt 960  
aaggatggga aactcaagta ccaggtgtc gatggagaaa tgcctccgc ctcggtagaa 1020  
gaggcgcctg ttttgatgca ctacccctga ggcattccgc cccagagcca gatggctgt 1080  
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gagcacaacc gtgtgtgtga cctgtgtcaag gctgagcacc ccacctgggg cgatgagcag 1200  
ctttccaga caccgcctt catccatcata ggggagacca tcaagattgt catcgaggag 1260  
tacgtcagc agctgagtgg ctatttcctg cagctgaaat ttgacccaga gctgctgtc 1320  
gggttccagt tccaataccg caaccgcatt gccatggagt tcaaccatct ctaccactgg 1380  
cacccctca tgcctgactc cttcaagggtg ggctcccaagg agtacagcta cgagcagg 1440  
ttgttcaaca cttccatgtt ggtggactat ggggttgggg ccctgggtgg tgccctct 1500  
cgccagattt ctggccggat cgggtggggc aggaacatgg accaccacat cctgcatttg 1560  
gctgtggatg tcatcaggga gtctcggag atgcggctgc agcccttcaa tgagtaccgc 1620  
aagagtttgc tcatgaaacc ctacacccctt ttccaggagc tcgtaggaga gaaggagatg 1680  
gcagcagagt tggaggaatt gtatggagac attgtatgtt ggggttctca ccctggactg 1740  
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ccctttccc tcaagggtct ccttagggat cccatctgtt ctccggagta ctggaaaggcc 1860  
agcacatttg gcggcgagggt gggctttaac attgtcaaga cggccacact gaagaagctg 1920  
gtctgcctca acaccaagac ctgtccctac gtttccttcc gtgtgcccggta tgccagtcag 1980  
gatgtgggc ctgctgtgg ggcaccatcc acagagctc**T** GAggggcagg aaagcagcat 2040  
tctggagggg agagctttgt gcttgcatt ccagagtgtt gaggccaggg ctgtggct 2100  
taaatgctca ttttctgggt tggcatgggt agtgggggg ttgacattta gaactttaag 2160  
tctcacccat tatctggaaat attgtgattc ttttattct tccagaatgc tgaactcctt 2220

FIGURE 5

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**FIGURE 6**

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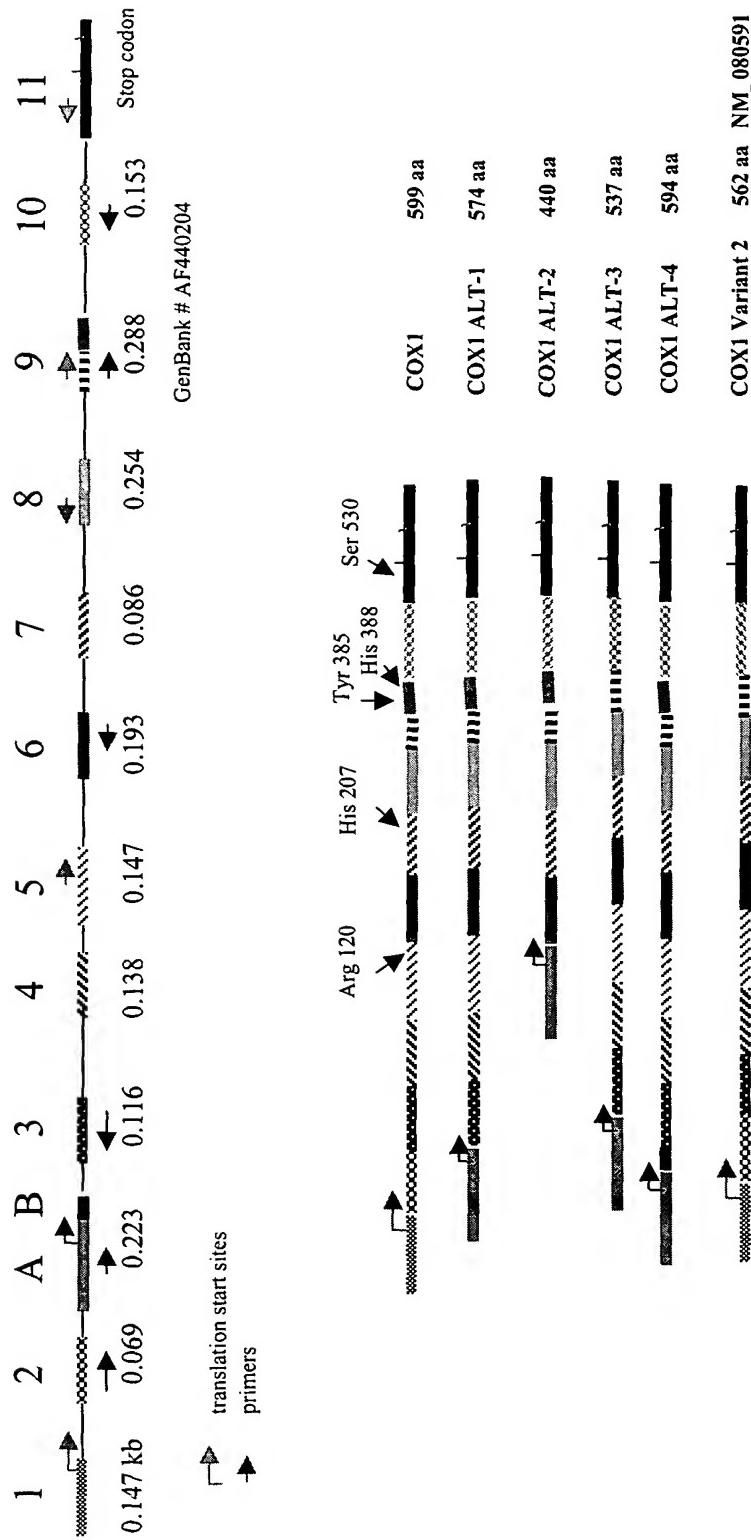


FIGURE 7

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## Tissue Distribution of Cox1 variant mRNAs

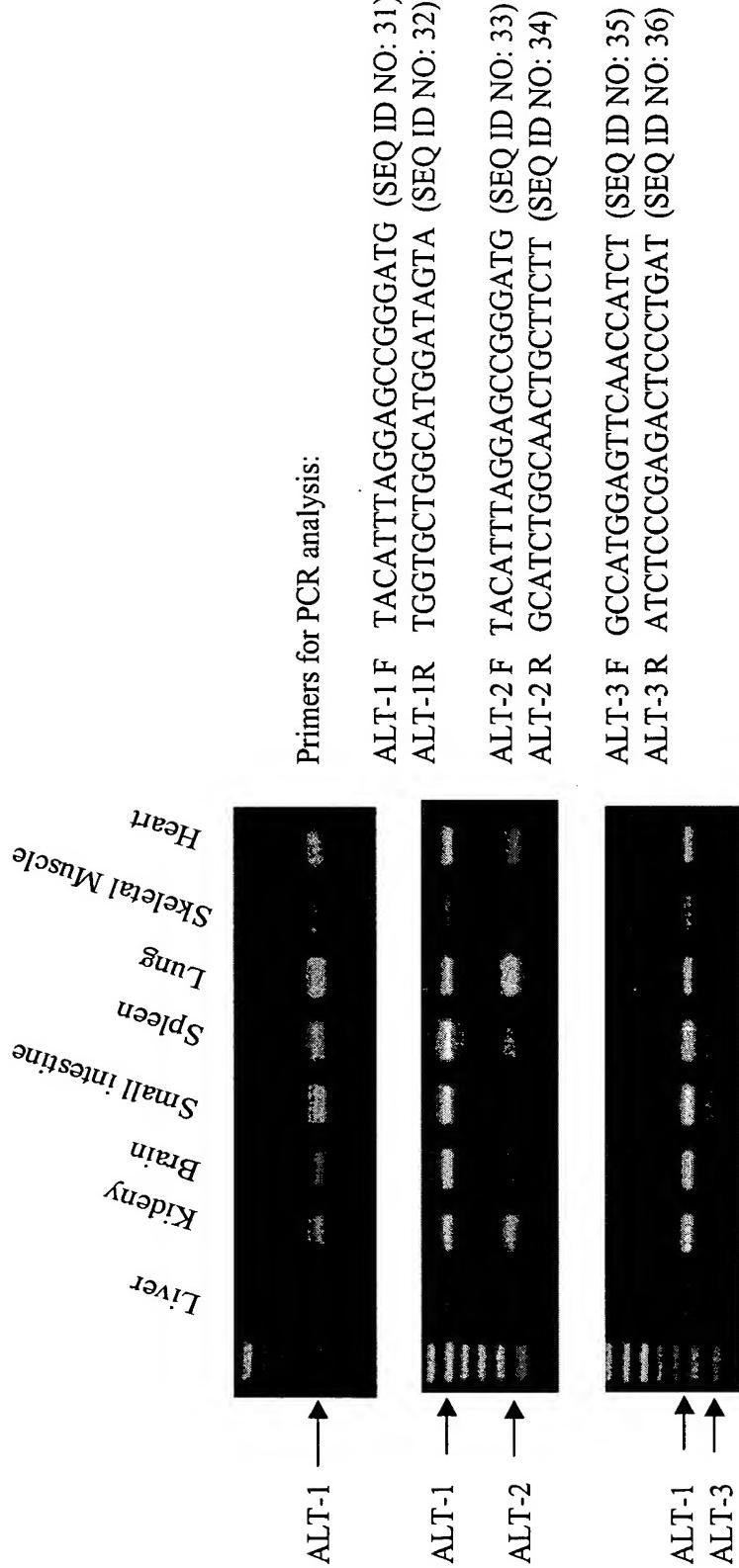
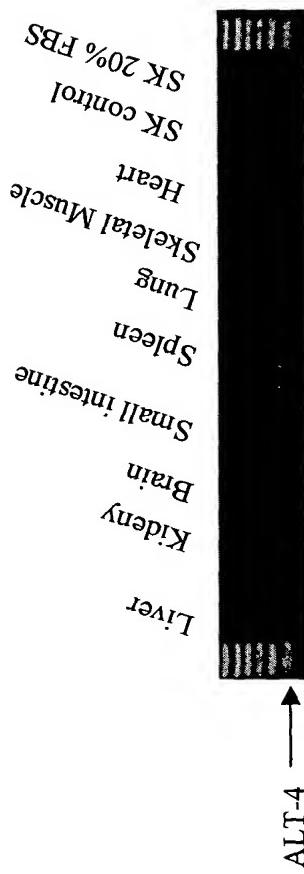


FIGURE 8

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## Human Tissue Distribution of COX-1 Variant ALT-4 mRNA



Primers for PCR analysis:

ALT-4 F TACATTAGGAGCCGGATG (SEQ ID NO: 37)  
ALT-4 R TGGTGCTGGCATGGATAAGTA (SEQ ID NO: 38)

FIGURE 9

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Induction of COX-1 Variant ALT-4 by 20% FBS in SK-N-SH Cells

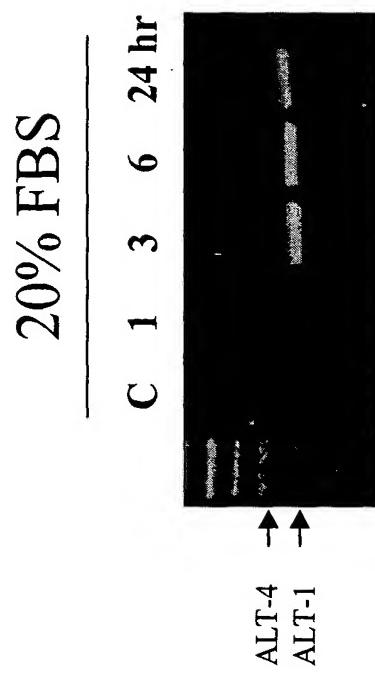


FIGURE 10